

***What is claimed is:***

1. A computer, comprising:
  - a housing having an access opening;
  - a removable access door for tool-less placement in front of the access opening in order to prevent passage through the access opening;
  - a quick release latching mechanism configured to facilitate the mount and release of the access door to and from the housing.
2. The computer as recited in claim 1 wherein the removable access door is secured to the housing without using fasteners.
3. The computer as recited in claim 1 wherein the quick release latching mechanism includes a housing side locking mechanism and a door side locking mechanism that are cooperatively positioned so that when the removable access door is placed in front of the access opening, the locking mechanisms are capable of lockably engaging with each other thus securing the removable access door to the housing..
4. The computer as recited in claim 1 wherein the quick release latching mechanism includes a plurality of retention hooks located on the housing that mate with a plurality of hook receivers located on the removable access door, the retention hooks being configured to engage the hook receivers in order to hold the removable access door in front of the opening.
5. The computer as recited in claim 4 wherein the retention hooks are movable between an engagement position, coupling the retention hooks with the hook receivers, and a disengagement position, decoupling the retention hooks for the hook receivers, the removable access door being secured to the housing when the retention hooks and hook receivers are engaged, the removable access door being released from the housing when the retention hooks and hook receivers are disengaged.
6. The computer as recited in claim 5 wherein quick release latching mechanism includes a quick release handle located on the outside of the housing, the quick

release handle moving the retention hooks between the engagement and disengagement positions.

7. A computer, comprising:
  - a housing having an interior portion;
  - a quick release removable fan module that slides in and out of the interior portion of the housing, the fan module making tool-less electrical and mechanical connections with the computer when the fan module is slid into the housing, the fan module making tool-less electrical and mechanical disconnections with the computer when the fan module is slid out of the housing.
8. The computer as recited in claim 7 wherein the fan module is secured within the computer without using fasteners.
9. The computer as recited in claim 7 wherein the fan module comprises:
  - a fan carrier and one or more fans mounted to the fan carrier, the fan carrier and one or more fans being installed and removed from the computer as a unit.
10. The computer as recited in claim 9 wherein the fan carrier comprises:
  - a mounting member for receiving the one or more fans, the mounting member having an opening for each fan;
  - an upper member positioned above the mounting member;
  - a lower member positioned below the mounting member;
  - a partition disposed between the openings in the mounting member; and
  - a handle for inserting and extracting the fan carrier from the computer.
11. The computer as recited in claim 7 wherein the housing has a cavity for receiving the fan module, the cavity including a first connector therein, and wherein the fan module includes a second connector that engages the first connector when the fan module is inserted into the cavity and that disengages the first connector when removed from the cavity.
12. The computer as recited in claim 7 wherein the housing has a cavity for receiving the fan module, the cavity including a first mounting portion, and wherein

the fan module includes a second mounting portion that engages the first mounting portion when the fan module is inserted into the cavity and that disengages the first mounting portion when removed from the cavity.

13. The computer as recited in claim 12 wherein the first mounting portion is a slot, and wherein the second mounting portion is a T-flange.

14. A computer, comprising:  
a housing having an interior portion;  
a drive configured for tool-less placement inside the interior portion of the housing; and  
a quick release latching mechanism configured to facilitate the mounting and release of the disk drive to and from the housing.

15. The computer as recited in claim 14 wherein the drive is secured within the computer without using fasteners.

16. The computer as recited in claim 14 wherein the drive is an optical disk drive.

17. The computer as recited in claim 14 wherein the quick release latching mechanism includes a drive side mating feature located on the disk drive that engages a housing side mating feature located inside the housing.

18. The computer as recited in claim 17 wherein the quick release latching mechanism includes one or more latches that urge the drive side mating feature into engagement and disengagement with the housing side mating feature, the mating features supporting and properly positioning the disk drive inside the housing when fully engaged, the disk drive being placed in a position for removal when fully disengaged.

19. The computer as recited in claim 18 wherein the latches are also configured to lock the mating features in their engaged position thus securing the disk drive to the housing.

20. The computer as recited in claim 14 wherein the drive is a hard drive.
21. A computer, comprising:  
a housing having a drive opening;  
a disk drive disposed inside said housing adjacent the drive opening;  
a drive door that slides internally and linearly up and down relative to the housing between an opened position where the drive door is placed away from the opening in order to allow access through the opening and a closed position where the drive door is placed in front of the opening in order to prevent access through the opening.
22. The computer as recited in claim 21 wherein the disk drive is an optical disk drive.
23. The computer as recited in claim 21 wherein a disk tray of the disk drive pushes on an interior portion of the door thereby causing the door to slide down to the opened position.
24. The computer as recited in claim 23 wherein the drive door is slidably coupled to a frame, the frame being configured for tool-less placement within a bracket located on the housing adjacent the drive opening in the housing.
25. The computer as recited in claim 24 wherein the frame is secured within the bracket without using fasteners.
26. The computer as recited in claim 25 further including a motion transformer configured to transfer the linear motion of the disk tray to linear motion of the drive door.
27. The computer as recited in claim 26 wherein the motion transformer includes a rotatable cam having a ramp portion and a gear portion, the ramp portion interfacing with the disk tray and the gear portion interfacing with a corresponding gear portion on the drive door, the ramp portion being configured to receive the disk tray in order to rotate the cam, the rotating cam causing the gear portion to mate with the

corresponding gear portion on the drive door in order to move the drive door linearly.